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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,359	07/29/2003	Toshikazu Yamamoto	14815-016001	6239

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EXAMINER

GEISEL, KARA E

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/629,359

Applicant(s)

YAMAMOTO ET AL.

Examiner

Kara E. Geisel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Preliminary Amendment

The preliminary amendment filed on July 29th, 2003, has been entered into this application.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

The certified copy has been filed in this application on July 29th, 2003.

Claim Objections

Claim 8 is objected to because of the following informalities: "wherein light passes though the spectroscopic device at several times"; should the "at" be removed to clarify? Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US Pubs 2003/0007149).

The applied reference has two common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

In regards to claims 1-4, Yamamoto discloses a depolarizer (figs. 1A-B) comprising a second birefringent plate having a thickness which continuously changes in a direction of an optical axis of the second birefringent plate (1d); a third birefringent plate having a thickness which continuously changes in a direction of 45 degree with respect to an optical axis of the third birefringent plate (1a); wherein reduction direction of the thickness of the second birefringent plate and a reduction direction of the thickness of the third birefringent plate are opposite to each other; a first birefringent plate having a thickness which continuously changes in a direction perpendicular to an optical axis of the first birefringent plate (1c); wherein the first birefringent plate (1c) is stuck on the second birefringent plate (1d) so that a reduction direction of the thickness of the first birefringent plate and the reduction direction of the thickness of the second birefringent plate are opposite to each other; and a fourth birefringent plate

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having a thickness which continuously changes in a direction of -45 degree with respect to an optical axis of the fourth birefringent plate (1b); wherein the fourth birefringent plate (1b) is stuck on the third birefringent plate (1a) so that a reduction direction of the thickness of the fourth birefringent plate and the reduction direction of the thickness of the third birefringent plate are opposite to each other. It is not disclosed that the second birefringent plate (1d) is stuck to the third birefringent plate (1a) (which would produce a depolarizer having the plate order of 1c, 1d, 1a, and finally 1b). However, it would have been an obvious matter of design choice to stick plate 1d to 1a to get a depolarizer in this order, since Applicant has not adequately disclosed any testing or analytical data which establishes criticality for these modifications, or recites any specific advantage the invention benefits from over the prior art from this modification. Furthermore, it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. It appears that Yamamoto's depolarizer would perform equally well when the plates are arranged in this order, and changing the order would be done merely as a design choice.

In regards to claim 5, the plates can be composed of crystal, calcite, mica, and magnesium fluoride (page 4, ¶ 59).

In regards to claim 6, Yamamoto discloses a spectroscope (fig. 3) comprising the depolarizer (1) as disclosed above, which is positioned at a previous stage of a spectroscopic device, wherein a reduction direction of the thickness of the second birefringent plate (fig. 1A-B, 1d) and a dispersion direction (fig. 15) of the spectroscopic device intersect orthogonally with each other (fig. 3).

In regards to claim 7, the light incident surface of the second birefringent plate (fig. 1A-B, 1d) is inclined with respect to an incident direction of the light in the depolarizer (fig. 3, light).

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In regards to claim 8, the light passes through the spectroscopic device several times (page 4, ¶ 38).

In regards to claim 9, discloses a spectroscope (fig. 3) comprising the depolarizer (1) as disclosed above, which is positioned at a previous stage of a spectroscopic device. It is not disclosed that the device has a one dimensional optical detector for detecting an output light of the spectroscopic device in parallel. However, the examiner takes Official Notice that replacing a single detector with a one dimensional detector is well known in the art, so that multiple wavelengths can be detected simultaneously, and for obviating the need of the grating to be moved in order to detect multiple wavelengths, therefore increasing the accuracy of the device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace Yamamoto's single detector (8) with a one dimensional detector is well known in the art, so that multiple wavelengths can be detected simultaneously.

Additional Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art made of record is Schmidt et al. (USPN 3,807,837), and Kremen (USPN 4,198,123).

Schmidt discloses a depolarizer comprising a first birefringent plate having a thickness which continuously changes in a direction of an optical axis of the first birefringent plate; a second birefringent plate having a thickness which continuously changes in a direction perpendicular to an optical axis of the first birefringent plate; wherein the first birefringent plate is stuck on the second birefringent plate so that a reduction direction of the thickness of the first birefringent plate and the reduction direction of the thickness of the second birefringent plate are opposite to each other.

Kremen discloses a depolarizer comprising a first birefringent plate having a thickness which continuously changes in a direction of an optical axis of the first birefringent plate; a second birefringent

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plate having a thickness which continuously changes in a direction perpendicular to an optical axis of the first birefringent plate; wherein the first birefringent plate is stuck on the second birefringent plate so that a reduction direction of the thickness of the first birefringent plate and the reduction direction of the thickness of the second birefringent plate are opposite to each other.

Conclusion

Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice in this Office Action mailed. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the next reply after the Office action in which the well-known statement was made.

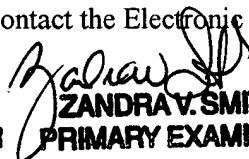
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kara E Geisel whose telephone number is 571 272 2416. The examiner can normally be reached on Monday through Friday, 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571 272 2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NDRA V. SMITH
PRIMARY EXAMINER


ZANDRA V. SMITH
PRIMARY EXAMINER



Gregory J. Toatley, Jr.
SPE
Art Unit 2877

K.G.

KEG

September 21, 2005